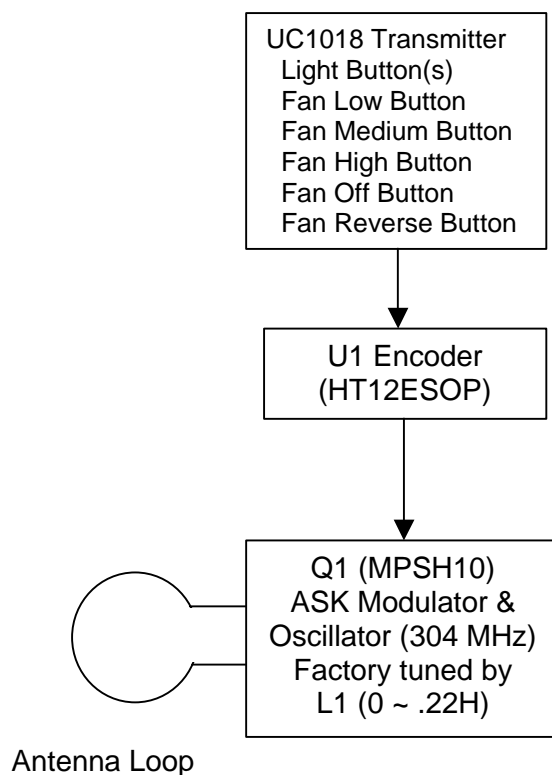# Casablanca Fan & Light Remote Control Transmitter Block Diagram

Description:

The top box of the diagram below represents all of the potential keys that may be pressed for the Casablanca W-42 & W-43 transmitters. Pressing any key generates an encoded PCM code word which will modulate on a 304 MHz RF carrier for transmission. The encoded PCM code word is obtained from encoder U1 and is ASK modulated by the RF oscillator formed by transistor Q1. Encoder U1 also provides four selectable security bits which can be set by the user. The frequency is factory tuned by inductor L1 to 304 MHz, and is not user adjustable.

```
┌─────────────────────────┐
│ UC1018 Transmitter      │
│   Light Button(s)       │
│   Fan Low Button        │
│   Fan Medium Button     │
│   Fan High Button       │
│   Fan Off Button        │
│   Fan Reverse Button    │
└─────────────────────────┘
              │
              ▼
┌─────────────────────────┐
│   U1 Encoder            │
│   (HT12ESOP)            │
└─────────────────────────┘
              │
              ▼
        ┌─────────────────────────┐
   ◯────│   Q1 (MPSH10)           │
        │   ASK Modulator &       │
        │   Oscillator (304 MHz)  │
        │   Factory tuned by      │
        │   L1 (0 ~ .22H)         │
        └─────────────────────────┘
  Antenna Loop
```
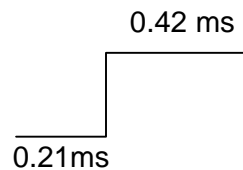
Hunter Fan & Light Remote Control RF Transmitter Coding

Description: The UC1018 transmitter uses the following code words to modulate on a 304 MHz RF carrier by using ASK modulation.
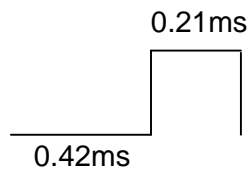
Examples of code words for different commands:

        1xxxxx000101
        1xxxxx001001
        1xxxxx000110
        1xxxxx000111
        1xxxxx001000
        1xxxxx001101
        1xxxxx001110   (Where "x" can be set to "1" or "0" by the user with DIP switches.)

Code "0" is represented as:

        0.42 ms

    0.21ms

Code "1" is represented as:

        0.21ms

    0.42ms

The interval between two code words is about 7.56 ms.